

## United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,118	08/04/2003	D. Keith Miller	4847-04A	5751
4678 M A CCOPD N	7590 11/05/2007		EXAMINER	
MACCORD MASON PLLC 300 N. GREENE STREET, SUITE 1600			LUGO, CARLOS	
P. O. BOX 2974 GREENSBORO, NC 27402			ART UNIT	PAPER NUMBER
			· 3673	
			MAIL DATE	DELIVERY MODE
			11/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



. - 9

Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/634,118 Filing Date: August 04, 2003 Appellant(s): MILLER ET AL.

MAILED

NOV 0 5 2007

**GROUP 3600** 

Edward Rilee For Appellant Art Unit: 3673

#### **EXAMINER'S ANSWER**

This is in response to the appeal brief filed August 28, 2007 appealing from the Office action mailed August 10, 2006.

#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

## (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

## (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

Application/Control Number: 10/634,118 Page 3

Art Unit: 3673

### (8) Evidence Relied Upon

4,801,164	MOSCH	1-1989
6,135,510	DIGINOSA	10-2000
6,568,723	MURPHY et al	5-2003
1,948,542	REPASS	2-1934

#### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 9-14,17-30,35-40, and 43-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat No 4,801,164 to Mosch in view of US Pat No 6,135,510 to Diginosa.

Regarding claims 9,22, and 29, Mosch discloses a window latch comprising a cam latch (30 and 36); a housing (10); and a pivot fastener (31,32 and 42) for attaching the cam latch to the housing. The cam latch is selectively movable between a first open position and a second locked position to secure the window sash in the closed position.

Further, Mosch discloses a bushing (35) adapted for use with the pivot fastener and a detent for retaining the cam latch in one of the open or locked positions. The detent includes at least one protrusion (67 and 68) on one of the housing and the bushing and a receiving groove (65 and 66) on the other of the housing and the bushing (Col. 4 Lines 25-35).

Application/Control Number: 10/634,118

Art Unit: 3673

Mosch fails to discloses supporting walls that engage the surface of the window sash. However, an ordinary skill in the art would appreciate that by providing a cross bracing across the housing would provide strength to the housing.

To demonstrate this point, Diginosa is provided that is to teach that is well known in the art to have supporting walls that extends from one perimeter wall to another perimeter wall and that engage a surface of a window sash so as to impart strength to the housing (see attachment #1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate into the device described by Mosch supporting walls capable of engaging a surface of the window sash, as taught by Diginosa, in order to provide support to the housing structure.

As to claims 10 and 36, Mosch discloses that the cam latch includes an actuator arm (30), a locking arm (body of 36) and a pivot point (through 31) between the actuator arm and the locking arm.

As to claims 11 and 37, Mosch discloses that the window latch further includes a finger tab (end portion of 30) on the actuator arm.

As to claims 12 and 38, Mosch illustrates that the locking arm further includes a cam wall (50).

As to claims 13 and 39, Mosch illustrates that the ratio of the length of the actuator arm to the length of the locking arm is greater than about 2 to provide a mechanical advantage when the window latch is operated (see Figure 4).

As to claims 14 and 40, Mosch discloses that one of the actuator arm and the locking arm includes a key lock receptor (55) and the other of the actuator arm and the locking arm including a complementary key lock (69) extending into the key lock receptor for attaching the cam latch to the housing.

As to claims 17 and 43, Mosch discloses that one of the key lock and the key lock receptor further includes an alignment feature and the other of the key lock and the key lock receptor further includes a mating alignment feature (32,33 and 55).

As to claims 18 and 44, Mosch illustrates that the housing extends beyond the pivot fastener parallel to the window frame (Figure 3) and includes an aperture (14 and 15) for receiving a fastener for attaching the housing to the window.

As to claims 19 and 45, Mosch discloses that the aperture for receiving a fastener includes a retainer (the retainer can be the top edge of the apertures 14 and 15) for receiving a fastener.

As to claims 20 and 46, Mosch discloses that the base of the aperture for receiving a fastener includes a cavity (space under 14 and 15) for receiving shavings formed by attaching the window latch to the window.

As to claims 21 and 47, Mosch illustrates that the housing extends beyond the pivot fastener parallel to the window frame to include a finger shoulder for providing access to the cam latch.

As to claims 22 and 48, Mosch, as modify by Diginosa, illustrates that the support wall is between the aperture and cam latch.

As to claims 23 and 49, Mosch, as modified by Diginosa, illustrates that the support wall is substantially perpendicular to the window frame.

Page 6

As to claims 24 and 50, Mosch discloses that the window latch further comprises a locking arm catch (12).

As to claims 25 and 51, Mosch discloses that the window latch further includes a cam detent (53) for engaging the locking arm.

As to claims 26,27,52 and 53, Mosch discloses that the window latch further includes an aperture (16 and 17) for receiving a fastener for attaching the locking arm catch to the window.

As to claims 28 and 54, Mosch discloses that the pivot fastener is substantially non-compressible so as to facilitate the selective movement of said cam latch between the first open position and the second locked position.

As to claim 30, Mosch detent is capable of provide an audible indication of the cam latch being in one of the open and the locked positions.

As to claim 35, Mosch discloses that the detent includes a resilient portion (67 and 68) on one of the housing and the bushing.

Claims 15,16,41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat No 4,801,164 to Mosch in view of US Pat No 6,135,510 to Diginosa as applied to claims 14 and 40 above, and further in view of US Pat No 6,568,723 to Murphy et al (Murphy).

Mosch, as modified by Diginosa, fails to disclose the use of a fastener extending into the key lock and key lock receptor. Mosch discloses the use of a pin (31).

Murphy teaches that it is well known in the art to secure a key lock (38) into a key lock receptor (32) using a threaded fastener (Figure 2b).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to secure the key lock described by Mosch, as modified by Diginosa, with a fastener, as taught by Murphy, in order to secure the members.

Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat No 4,801,164 to Mosch in view of US Pat No 6,135,510 to Diginosa as applied to claim 29 above, and further in view of US Pat No 1,948,542 to Repass.

Mosch, as modified by Diginosa, fails to disclose that the detent includes at least one protrusion on one of the housing and the cam latch and a receiving groove on the other of the housing and the cam latch.

Repass teaches that it is well known in the art to provide an apparatus to lock a window defining a detent that includes at least one protrusion (27) on one of the housing and the cam latch and a receiving groove (28) on the other of the housing and the cam latch.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus described by Mosch, as modified by Diginosa, with a detent that includes a protrusion/groove engagement between the housing and the cam latch, as taught by Repass, in order to positioning and/or hold the cam latch with respect to the housing.

Art Unit: 3673

(10) Response to Argument

First, in order to clarify the record, in Page 7 Line 11 and 13 and in Page 9

Page 8

Line 20, it should be -claim 9- instead of "claim 1" since claim 1 has been cancelled.

As to the arguments, the applicant argues that the prior art fails to disclose some

limitations of claim 9, specifically points b and e, wherein the protrusion and the

groove are substantially parallel to the axis of the pivot fastener and that the pair of

rigid walls extends downward to engage a surface of the window sash (Page 7 Line

10).

Mosch discloses that the detent comprises a pair of protrusions (67 and 68) that

engages respective grooves (65 and 66). Since the bushing 35 is attached to the

pivot fastener 31,32 and to the cam 36, the protrusions are considered as on the

cam latch. The claim language does not require that they have to be "directly"

extending and/or "directly on" the housing and/or the cam latch. Then, as clearly

seen in Figure 2, elements 65-68 are "substantially" parallel to the axis of the pivot

fastener (31,32 and 42). Even if the applicant argues that the detent is "directly on"

one of the housing and the cam latch, Repass teaches that limitation (see rejection

to the claims 31,32).

As to the pair of rigid interior walls, an ordinary skill in the art would appreciate

that by extending a surface of the housing described by Mosch (see attachment #2)

in order to create a cross bracing across the housing would provide strength to the

housing. Diginosa has been provided in the record to demonstrate that it is well

known in the art to provide rigid walls that are capable of providing more strength to the housing.

The applicant also argues obviousness (Page 7 Point 7.1.1). The applicant is reminded that a conclusion of obviousness may be made from common knowledge and common sense of the person of ordinary skill without any specific hint or suggestion in a particular reference.

Also, the applicant argues that neither reference appears to consider the need for additional strength and support (Page 8 Line 6). Clearly, Mosch, a modified by Diginosa, consider the need of creating a cross bracing in order to provide support and strength to the housing.

The applicant also argues that the modification, Diginosa, would destroy the purpose of the primary reference, Mosch (Page 8 Point 7.1.2), the argument is not persuasive. As clearly shown in attachment #2, adding rigid side walls in the housing described by Mosch does not affect the mechanism or movement of the latch.

The applicant also argues that Mosch, as modified by Diginosa, fails to recognize the problem itself, how to add strength to the housing (Page 9 Point 7.1.3). As clearly shown in attachment #2, an ordinary skill in the art would consider the need of creating a cross bracing in order to provide support and strength to the housing. Diginosa shows that it is well known in the art to solve this problem by adding a rigid wall (see attachment #1).

Application/Control Number: 10/634,118

Art Unit: 3673

The applicant further argues that Mosch fails to disclose that the protrusion and the groove are substantially parallel to the axis of the pivot fastener (Page 9 Point 7.1.4).

Figure 2 clearly shows that elements 65-68 are "substantially" parallel to the axis of the pivot fastener 31,32 and 42 (see attachment #2).

The applicant further argues that Diginosa fails to disclose that the rigid wall location (Page 10 Point 7.1.5). the rejection made by the examiner was Mosch in view of Diginosa, Mosch clearly illustrates that the housing have a surface that goes from the top to a certain point (the steps where 14 and 15 are located). Diginosa is only used to demonstrate that the use of rigid walls to give strength and support is well known in the art.

As to the argument presented by the applicant in Page 11 Point 7.2, the argument is not persuasive. Mosch, as modified by Diginosa and Murphy, discloses the invention as claimed.

Finally, the applicant argues that Repass fails to teach a detent that has a protrusion and a semi-circular retaining groove to retain the cam in an open or latch position (Page 11 Point 7.3).

The applicant main argument is that Repass protrusion/groove 27,28 is not capable of retains the cam in one of the open or latch positions.

As seen in attachment #3, Repass and the current invention illustrates the same structure. Therefore, if the structure defined by the applicant is capable of "retain" in one of the open or latch positions, then Repass device is also capable.

Art Unit: 3673

## (11) Related Proceeding(s) Appendix

No decision rendered by a court or the examiner in the Related Appeals and Interferences section of this examiner's answer identifies the Board.

For the above reasons, it is believed that the rejections should be sustained.

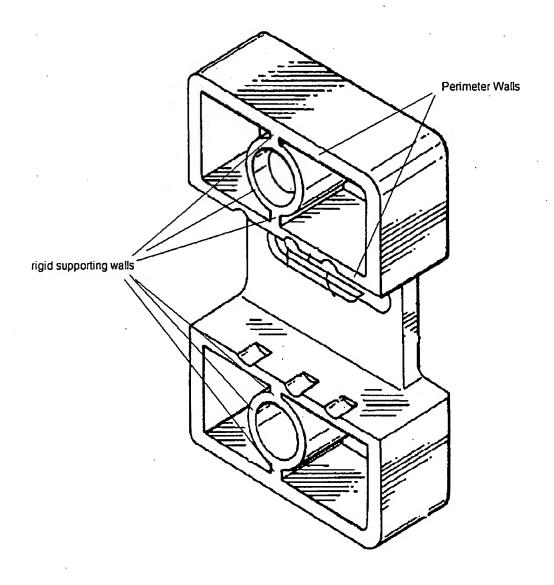
Respectfully submitted,

Carlos Lugo C.L.

Conferees:

Patricia Engle

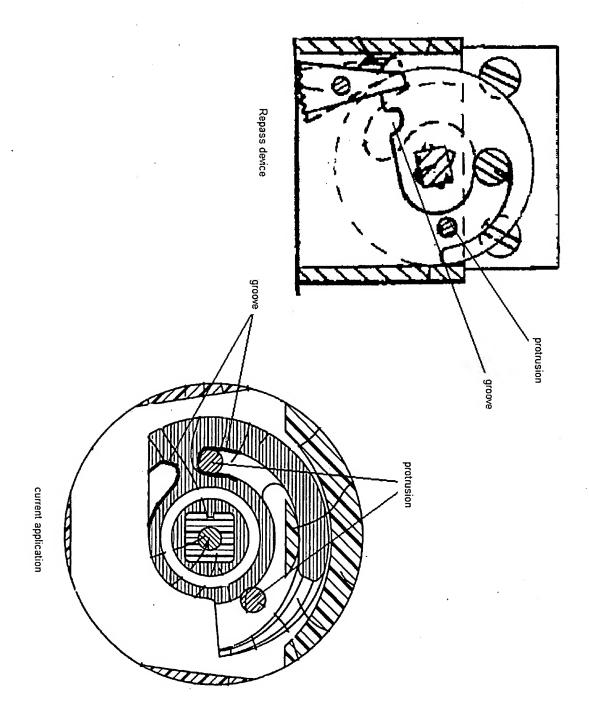
Meredith Petravick



Attachment #1

pivot fastener axis

Attachment #2



Attachment #3